

MARYLAND TIDEWATER NEWS

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Lobsters Off The Maryland Coast

The occurrence of the lobster in Maryland coastal waters comes as a surprise to many conservationists. Biologists have known for more than a half century that the American lobster, *Homarus americanus*, ranges in the Atlantic Ocean as far south as North Carolina, but few records are available to show the incidental commercial exploitation of this resource south of the Delaware coast. The U. S. Bureau of Fisheries recognized in 1900 a commercial lobster pot fishery just north of Maryland. Shortly after the depression years the beginning of extensive offshore trawling or "dragging" featured the occasional capture of a lobster in ocean waters from five to sixty miles offshore in depths of 25 to 200 feet. These captures were incidental to trawling for fish. In 1938, 100 pounds of lobster were sold commercially by Maryland draggers, although fishermen reported that these crustaceans had been captured and utilized locally before that year. The increased use of otter trawls has produced a somewhat greater harvest, i. e., 1500 pounds in 1948, although it must be emphasized that this is quite incidental to the ocean fin-fishery production. Many more lobsters that do not enter the official commercial statistics are said to be caught and used locally.

An adult female lobster that weighed about six pounds was observed on May 25, 1953 at Ocean City, a specimen captured in a trawl in 80 feet of water at Jack's Spot about 16 miles offshore. The swimmerets on the underside of the abdomen were thickly covered with eggs about 1.5 mm. in diameter. Such a specimen is said to be "in berry" and in the New England states is illegal for capture. A lobster about 20 inches in length (from rostrum to tip of telson or tail-flipper) produces about 75,000 eggs. It is known that lobsters spawn in the colder and deeper waters of Maryland. As far as is known, they do not migrate from northern waters. On the other hand, a tagging study in New England revealed that lobsters may travel 60 miles from the place of tagging. Their abundance and distribution is limited by water temperatures; few are taken close to shore because of the relatively shallow warm waters on the Maryland coast. In the northern part of its range above New Jersey it is taken near shore in pots, but farther south it is taken principally in otter trawls. A few individuals are snagged with hook and line by anglers far offshore. Draggers operating off Ocean City state that the capture of lobsters in trawls is not an unusual event. Very large individuals have been reported but probably none has exceeded the 34-pound giant lobster from New Jersey that is preserved in the American Museum of Natural History, although one report indicates that a 47-pound lobster has been taken in the southern range. Those weighing over 20 pounds

are regarded as unusually large examples. A representative of the Chesapeake Biological Laboratory took a lobster in 1934 that weighed 24 pounds.

Attempts have been made to introduce lobsters into Chesapeake Bay. In 1884, 100 lobsters were transplanted from the eastern part of Long Island to Chesapeake Bay by Lieutenant W. M. Wood of the U. S. Navy. In October, 1885, 125 small and medium sized specimens, many of them being females with a full supply of eggs, were transported to Chesapeake Bay. On arrival, only 63 were alive; these were deposited off Block River Light (Back River Light, mouth of James River?). As far as is known, this introduction was completely unsuccessful. In general, temperature, salinity, and bottom conditions in Chesapeake Bay are unsuitable for successful introduction of the lobster. Several years ago the capture of a "lobster" off Tilghman Island created considerable excitement among hopeful watermen and state officials. In fact, suggestions were made to establish a fishery by means of stocking the Bay with lobsters

SPAWNING REPORTED

Biologists of the Chesapeake Biological Laboratory have studied the breeding habits of oysters in Maryland waters over a number of years and have worked out rather definitely, among other things, the season of spawning and setting, together with some of the factors affecting same. They have noted especially the relationship of water temperatures and fouling organisms to oyster reproduction and survival in the early very delicate stages.

The details of the work of the biologists have been reported from time to time in the NEWS and in special reports, thus they are not set forth here at this time. Recently, however, there has been set up a system at the Laboratory for the notification of all interested persons as to when and where (in broad areas) spawning starts, the intensity of spawning that is taking place, and information on the initiation of setting and the degree of same throughout the season. The Commission of Tidewater Fisheries, with its tremendous shell planting program, is kept informed fully, while all operators known to the Laboratory to be seed growers are on the mailing list to receive copies of the special bulletins to be issued on oyster spawning and setting. This service is based upon precise information and is being provided to those who plant shells in order to help them to realize greater sets of oysters, thus more seed and better returns from their operations. It is available without cost to the press and the public in general upon request.

from New England. The plan was abandoned when the so-called "lobster" was correctly identified as a crawfish, the miniature fresh water relative of the lobster commonly found in Maryland rivers and streams.

The development of a large lobster fishery off the Maryland coast is improbable because of the limited natural supply. Although no studies have been undertaken to survey potential lobster areas, it is believed that, in general, conditions are unsuitable except in deep areas far offshore. Modified lobster pots are set by commercial fishermen off Ocean City, but these harvest the black sea bass, *Centropristes striatus*. In fact, the traps are known as "bass pots." Fishermen believe that such traps are at their greatest efficiency close to shore for bass than far off shore and that there are few lobsters to be taken. The catch records listed below indicate an apparent annual increase in production of lobsters, but such records cannot be construed to indicate an increase in lobster abundance; rather, they indicate the use of more

trawls and greater fishing effort.

The Maryland Legislature enacted the following statute in Chapter 173 of 1945 (113B) of the Annotated Code: "It is unlawful to possess, sell or transport any spawning lobster measuring less than 3 1/2 inches from the rear end of the eye socket to the rear of the body shell." Later, Maryland joined seven other states in 1949 in observing the "Uniform Lobster Act." This law stipulates that the minimum legal size is 3 1/8 inches from eye socket to rear of body shell in Maine, New Hampshire, Connecticut, New Jersey, Pennsylvania, Delaware, Georgia and Maryland. There are no other laws governing the capture of lobsters off Maryland's coast. The minimum shell measurement is 3 3/16 inches in Massachusetts, New York and Canada, with a further proviso that the minimum size should go up another 1/6 of an inch the following year 3 1/4 inches. Transportation of undersized lobsters through states which have increased the size limits has posed a problem of law enforcement in recent years.

Harvest of Lobsters in Atlantic Ocean off Maryland and Virginia,

1931 — 1951*

Year	Maryland		Virginia		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
1931	—	—	12	\$ 2	12	\$ 2
1932	—	—	33	6	33	6
1933	—	—	131	2	131	2
1934	—	—	100	12	100	12
1935	—	—	700	82	700	82
1936	—	—	200	15	200	15
1938	100	\$ 20	1,400	157	1,500	177
1942	—	—	900	124	900	124
1944	100	30	1,300	260	1,400	290
1945	500	200	—	—	500	200
1946	600	180	300	100	900	280
1947	1,100	440	800	340	1,900	780
1948	1,500	450	900	270	2,400	720
1949	1,100	235	900	265	2,000	500
1950	1,100	275	3,900	1,260	5,000	1,535
1951	400	100	—	—	—	—

*Statistics based on published reports of the U. S. Fish and Wildlife Service.

KASK RESIGNS

Announcement was made by the Secretary of the Interior, Douglas McKay, last month of the resignation of Dr. John L. Kask as Assistant Director of the Fish and Wildlife Service. Kask became assistant director early in 1952 to fill the vacancy that resulted from the retirement of Milton C. James. Dr. Kask has had more than a quarter of a century of service with FAWS, having worked his way up to Chief of the Service's Office of Foreign Activities prior to assuming his last office. With his resignation he also relinquishes his membership, one of three, as United States Commissioner on the International Commission for the Northwestern Atlantic Fisheries, together with three or four other commissions of an international character. His loss to the United States will be Canada's gain since Dr. Kask has been appointed Chairman, Fisheries Research Board of Canada, at Ottawa.

SHELL PLANTINGS BIG

The Commission of Tidewater Fisheries is bending every effort to place in the waters of Maryland the biggest planting of shells ever made by that agency. A conservative forecast of volume of shells being planted is upward of 1,500,000 bushels,

an operation that has been in progress for some months. This extensive effort is a part of the Commission's program to restore oyster production in the Bay and is being made possible, in part, by a law which requires that packers make available for the work fifty percent of their annual shell yields. High points in shell planting in the State reach back to 1949 or even 1939, when approximately one and a half million bushels of them were returned to the public beds of the State. A factor of importance in the analysis of the present effort is that of measure in which shells now being bought or those acquired through legal sources are obtained in full measure as compared with about seventy percent run in measure until recent years, due to better procedures of handling.

CHARITY AT HOME

Captain Benevolent: "You know the Seafarers Home for Old Ladies, Cap'n Charity: Well I'm on the Committee for Donations. Will you give me something?"

Captain Charity: "Sure will, Cap'n Benevolent. There's that redheaded mother-in-law of mine, take her along."

With the Editor

Announcement is made in another column of THE NEWS of a new service provided by the Chesapeake Biological Laboratory to oyster shell planters or seed growers in Maryland through the issuance of bulletins seasonally in which will be carried timely information about oyster "ripening," spawning and setting. It has been determined by the Laboratory's biologists that oysters spawn only during the season of higher temperatures and that, though there is a marked correlation between spawning and temperature, the release of eggs and sperms into the water varies markedly in intensity during the summer and early fall. The studies indicate that the most intense setting period comes in July although peaks of setting have been observed in September.

Shell planting years back in Maryland was done during the off season, mainly in April and May, or even in the winter. The biologists have observed that shell are much more effective in collecting spat or oyster sets if they are deposited on the bottom, clean and fresh, at or near the time spawning and particularly setting are taking place. It is in this connection that those who would plant shells are to be kept informed on the state of oysters as regards spawning and setting, thus to increase the efficiency of the shells and, it is excepted, increase the yield of seed oysters. The bulletins, or mimeographed sheets, are much like reports issued by the Oyster Laboratory, FAWS, at Milford, Connecticut, and by the State of Washington where the oyster interests await them with considerable interest and plan their operations accordingly.

NEW FISHERY SURVEY

Under the joint sponsorship of the Sport Fishing Institute and the Chesapeake Biological Laboratory, an entirely new type of fishery study was initiated during June, 1953. A well-trained graduate student in the Department of Economics at George Washington University is making the survey. His job will be to ferret out the non-biological aspects of sports fishing in which he will treat the problem as a survey of a "recreational industry." He will attempt to trace the many associated values of sport fishing to Maryland. During the past session of the General Assembly figures were quoted in many cases which had little factual basis, thus such information is greatly needed and, if successful, this project will be of considerable interest to sportsmen, conservationists and fishery workers. The field studies will be centered in the Shadyside-Deale-Annapolis area, where preliminary contacts have been made by the fin-fish unit of the laboratory, while the base of operations will be at George Washington University in order to take advantage of the library facilities and the guidance of the faculty of the Department of Economics.

PROBLEM OF OYSTER BED TAX

A unique tax case arose in Dorchester County recently in which an assessor placed, for tax purposes, a value of \$19,000 on the bottoms of Punch Island Creek, holdings that over the years were not assessed at all. The bottoms in question are not leased from the State, as is more often the case in oyster cultivation, but are held, instead, under riparian rights or conditions of being land locked. The bottoms in question were operated privately by Captain William Northam, of Solomons Island, and held by him through purchase of land adjacent to the Creek, together with the under water rights that went with the title of the property. Previously such bottoms had not been taxed in Maryland. Captain Northam developed the bottoms and, after some years, entered into an agreement with a New Jersey firm for their sale, together with the land, payment to be made over a twelve year period and at a relatively substantial price. It was at this point that the tax matter came to the fore in which Attorney Emerson C. Harrington, Jr., acting for Captain Northam, carried the case to the Tax Commission.

The BALTIMORE SUN commented editorially on the Northam tax case on June 20, 1953, which, because of its timeliness, fullness and insight we quote:

"A \$19,000 assessment on a privately operated oyster ground or bottom in Dorchester county has been stricken out by the State Tax Commission. This means that the "owner" of the area will not have to pay either county or State property taxes on his holdings, unless an appeal is taken and the decision reversed by the courts."

The case here involved is unique in Maryland. The oyster bottom in question is in Punch Island Creek, the mouth of which is less than 100 yards wide. Under a 60-year-old State law, the owner or owners of the land surrounding such a body of water hold exclusive riparian rights to the water area."

"Within the last few years Punch Island Creek has been extensively developed as an oyster farm under a lease from the owner of the adjacent land to a New Jersey oyster company. The venture has proven to be a successful one. It caught the eye of the assessor who, after a study, assessed the oyster farm at \$19,000. The assessor was to testify later that 'a value had been established somewhere,' a fact which can hardly be denied."

"In striking out the assessment, the Tax Commission held (1) that the exclusive privilege to farm oysters confers no title to the underwater land used and (2) that the special privilege granted 60 years ago by the Legislature could be revoked either by the Legislature or by the elements, which could widen the mouth of the creek beyond the 100-yard mark. These holdings are persuasive. But the legal questions here involved will not be settled beyond all doubt until the courts have ruled on them."

"It is true that the present case does not involve oyster farming on bottoms leased from the State. However, private oyster farming in Maryland is such a highly controversial matter that legal questions concerning it should not be left dangling in the air."

ARTIFICIAL RESPIRATION

Swimming, fishing and boating are on either the routine or in your vacation schedule, you want to be prepared to give artificial respiration in case of a drowning accident. New methods such as the hip lift and hip roll have been developed, but for the average untrained person the prone-pressure method is considered the easiest and best. Here are directions for it:

1. Lay the patient on his belly, one arm extended directly overhead, the other arm bent at elbow with the face turned outward and resting on hand or forearm. Nose and mouth must be free for breathing.

2. Kneel straddling the patient's thighs with your knees at such a distance from his hip bones as will allow you to place your hands as follows: Palms of your hands on the small of the patient's back, fingers resting on the ribs, little fingers just touching the lowest ribs. Thumbs and fingers should be in a natural position with the tips of the fingers just out of sight.

3. With your arms straight, swing forward slowly so that the weight of your body is gradually brought to bear on the patient. Your shoulder should be directly over the heel of your hand at the end of the forward swing. Do not bend your elbows. This forward swing should take about two seconds.

4. Immediately swing backward so as to remove the pressure completely.

5. After two seconds, swing forward again. Repeat deliberately 12 to 15 times a minute the double movement of compression and release.

6. Continue artificial respiration without interruption until nature breathing is restored or until a physician pronounces the patient dead. You may have to continue it for four hours or longer.

7. As soon as artificial respiration has been started and while it is being continued, have an assistant loosen any tight clothing about the patient's neck, chest and waist.

SCIENCE NEWS LETTER

CONTRACT AWARDED

The Corps of Engineers, through the office of the Baltimore District, announced during May that contracts have been awarded to the Steam Contracting Corporation, Norfolk, Virginia, for maintenance dredging of the channels into the Pocomoke River, Somerset County (i. e. the "Muds"), and Fishing Creek, Calvert County. There has been considerable filling in of the approaches of these two bodies of water over the past few years and these operations will restore them to more useful depths.

FAIR AT ROSE-HAVEN

A bigger and better version of the Chesapeake Bay Fishing Fair, 1953, is to be held at the new and beautiful Rose-Haven, on Herring Bay, September 11-13. This event in the past has attracted great throngs of sportsfishermen and spectators when held in the North and Chesapeake Beach region, and with Rose-Haven as headquarters, located as it is convenient to metropolitan areas and to excellent fishing grounds, this year's affair should be the biggest ever. Surely those in charge are leaving no stone unturned in their effort to provide good sport and fine entertainment for those who attend. Upward of one hundred and fifty trophies and prizes have been provided to award skill and accomplishment on the occasion of the Fair.

POLLUTION ABATEMENT

A review of a forthcoming report of the Pollution Control Commission, 1952-1953, indicates that this agency, since its creation in 1947, has worked with 338 separate industries in the State, and of this number 159 have made complete corrections. That is, they have met all requirements laid down by Water Pollution Control Commission regulations. This is a forty-seven percent total correction of the pollutional problem originating from industries. This development does not include municipalities or discharge from abandoned coal mines.

The records of the Commission indicate that an additional 179, or fifty-three percent of the industries have made partial corrections and have received specific recommendations from the Water Pollution Control Commission for additional corrections necessary to meet all the requirements of the Commission. In many instances these additional recommendations are of a minor nature and in others they involve a rather extensive pollution control program and considerable expense to the industry.

CRAB DERBY, 1953

Crisfield is going all out for its 1953 version of the Crab Derby, which is scheduled for that city on September fourth, fifth and sixth. This affair, which has received nation-wide interest and attention in years past, is being organized and developed under the guidance of W. D. Ward, a local attorney. Crisfield Homecoming is scheduled along with this, the Sixth Annual Hard Crab Derby. The local Women's Civic Club will conduct a beauty contest the winner of which again will be crowned "Miss Crustacean" with all of the attending pomp, honor and ceremony. Apparently 100 racing entries are expected, many of which will come from parts far flung over the Chesapeake and from waters in other states. Civic clubs, the Chamber of Commerce and the officials of the City are cooperating with the American Legion, sponsors of the event.

NEW INVENTORY BULLETIN

Maryland is somewhat unique among the states of the Union in the field of conservation study in that provision was made by the General Assembly a few years ago for a comprehensive survey and inventorying of her natural resources. Theretofore, resource management in many instances was "by guess and by guns" since little was known about the actual stocks of natural resources on hand. Obviously, without knowledge of the location, quality and extent of natural resources to be managed, procedures used were in many cases inevitably of the hit and miss kind. As the inventory has progressed in forest and field, on land and in water, it became possible in several instances to see the entire conservation picture and be guided accordingly in stepping up improved management programs. The new publication, "Maryland's Natural Resources — Three Year Progress Report," is available at the Solomons Island office of the Department of Research and Education.

FACTUAL

Much is said and written about the gaint animals of past ages, such as the dinosaurs. It is true, however, that the largest species of animal that ever lived is still living — the blue whale, which may weigh up to one hundred and twenty tons or the equivalent in weight of 240 horses of an average weight of one thousand pounds.